

CLAIMS

1. A method for manufacturing at least one electrode on a II-VI semiconducting material or a compound of this material, this electrode being in a metal for which the work function is substantially equal to or larger than that of the II-VI semiconductor, this method being characterized in that the electrode is formed by electrochemical deposition of the metal from a solution of a chloride of the metal in pure hydrochloric acid.
2. The method according to claim 1, wherein the metal is gold or platinum and a gold or platinum chloride solution in pure hydrochloric acid is used.
3. The method according to claim 2, wherein the concentration of gold or platinum chloride in pure hydrochloric acid is less than 5%.
4. The method according to claim 1, wherein the surface of the material is prepared before the deposition in order to make this surface capable of fixing the metal.
5. The method according to claim 4, wherein the surface of the material is chemically etched.
6. The method according to claim 5, wherein the metal is gold or platinum, a gold or platinum chloride solution in pure hydrochloric acid is used and a solution of bromine and preferably pure hydrochloric acid is used for the chemical etching.

7. The method according to claim 1, wherein the material is CdTe.
8. The method according to claim 7, wherein the electrode is formed on a material which is selected from CdZnTe, CdTe:Cl, CdTeSe:Cl, CdZnTe:Cl, CdTe:In, CdZnTe:In and CdHgTe.